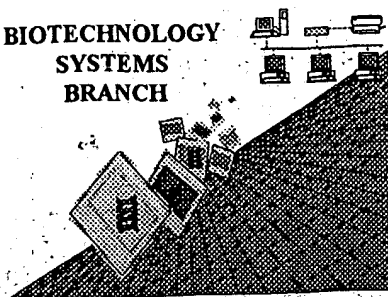


RAW SEQUENCE LISTING **ERROR REPORT**

BIOTECHNOLOGY
SYSTEMS
BRANCH



#6/158
8/11/01

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/577,304
Source: OLPE
Date Processed by STIC: 6/28/2001

RECEIVED

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TECH CENTER 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

OIPE

RAW SEQUENCE LISTING

DATE: 06/28/2001

PATENT APPLICATION: US/09/577,304

TIME: 14:38:16

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Does Not Comply
Corrected Diskette Needed
p. 6-7

3 <110> APPLICANT: Ma, Wu-Po
4 Lyamichev, Victor I.
5 Kaiser, Michael W.
6 Lyamicheva, Natalie E.
7 Allawi, Hatim T.
8 Schaefer, James J.
9 Neri, Bruce P.
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12 Acid Sequences
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309 35 40 45
311 Lys Ser Leu Leu Lys Ala Leu Lys Glu Asp Gly Asp Ala Val Ile Val
312 50 55 60
314 Val Phe Asp Ala Lys Ala Pro Ser Phe Arg His Glu Ala Tyr Gly Gly
315 65 70 75 80
317 Tyr Lys Ala Gly Arg Ala Pro Thr Pro Glu Asp Phe Pro Arg Gln Leu
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360 305      310      315      320
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374 Thr Thr Pro Glu Gly Val Ala Arg Arg Tyr Gly Gly Glu Trp Thr Glu
375 385      390      395      400
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390 465      470      475      480
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398 Ser Thr Ser Ala Ala Val Leu Glu Ala Leu Arg Glu Ala His Pro Ile
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401 Val Glu Lys Ile Leu Gln Tyr Arg Glu Leu Thr Lys Leu Lys Ser Thr
402      530      535      540
404 Tyr Ile Asp Pro Leu Pro Asp Leu Ile His Pro Arg Thr Gly Arg Leu
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417      610      615      620
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see
item 9
on Enon
summary
sheet

sample of error in seq. 7

09/572,304 2

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Leu Thr Thr Ser Arg Gly Glu Pro Val Gln Ala Val Tyr Gly Phe Ala
35 40 45

Lys Ser Leu Leu Lys Ala Leu Lys Glu Asp Gly Asp Ala Val Xaa Val
50 55 60

Val Phe Asp Ala Lys Ala Pro Ser Phe Arg His Glu Ala Tyr Glu Ala
65 70 75 80

Tyr Lys Ala Gly Arg Ala Pro Thr Pro Glu Asp Phe Pro Arg Gln Leu
85 90 95

Ala Leu Ile Lys Glu Leu Val Asp Leu Leu Gly Leu Xaa Arg Leu Glu

see item 9

sample of error in seq 8

FYI

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/577,304

DATE: 06/28/2001

TIME: 14:38:17

Input Set : A:\04408a.app

Output Set: N:\CRF3\06282001\I577304.raw

L:16 M:270 C: Current Application Number differs, Replaced Current Application Number
L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:800 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:800 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:800 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:806 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:806 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:806 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:812 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:812 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:812 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:820 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:820 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:820 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:822 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:822 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:822 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:824 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:824 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:824 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:826 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:826 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:834 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:834 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:834 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:836 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:836 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:836 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:840 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:840 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:840 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:844 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:844 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:844 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:848 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:848 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:848 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:850 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:850 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:850 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:852 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:852 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:852 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:854 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:854 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:854 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:858 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7

VERIFICATION SUMMARY

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L:858 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:858 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:860 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:860 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:860 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:876 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:876 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:876 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:878 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7
L:878 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7
L:878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:894 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:8
L:894 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:8
L:894 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:903 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:8
L:903 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:8
L:903 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:912 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:8
L:912 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:8
L:912 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:927 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:8
L:927 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:8
L:927 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:930 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:8
L:930 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:8
L:930 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:933 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:8
L:933 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:8
L:933 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:936 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:939 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:942 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:948 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:954 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:957 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:960 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:969 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:972 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:996 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:1005 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:1038 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:1041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:1047 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:1050 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:1157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:1328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:1394 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:1412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1441 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29

VERIFICATION SUMMARY

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Input Set : A:\04408a.app

Output Set: N:\CRF3\06282001\I577304.raw

L:1458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:1475 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:1492 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32
L:1521 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34